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EXAMINER	
YUEN, KAN	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/723,118	ORAN ET AL.	
	Examiner	Art Unit	
	KAN YUEN	2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 January 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8 and 10-20* is/are rejected.

7)☒ Claim(s) *9* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Response to Arguments

1. Applicant's arguments, see remark on page 7, filed on 1/14/2009, with respect to the rejection(s) of claim(s) 3-9, 13, 15 and 17-20 under 103 rejections have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Bushmitch et al. (Pat No.: 6275471).

Finality Note

2. The finality of the rejection made in the Office Action mailed on 11/14/2008 is withdrawn in order to apply a new ground of rejection. Examiner now, reconsidered the amendment filed before the Final Office Action (mailed on 11/14/2008), which is the Amendment after Non-Final Rejection filed on 06/05/2008.

Claim Objections

3. Claim 18-20 are objected to because of the following informalities:

In claim 18, line 8, the term "the RTP payload packets" lacks antecedence basis. It is not known whether the term "the RTP payload packets" is referring back to the RTP payload packets that are containing media payloads (in line 4), or the RTP payload packets are not containing media payloads (in line 7). Appropriate correction is required.

In claim 19, line 3, the duplicated term "that" should be deleted.

Claim Rejections - 35 USC § 103

4. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, 10-12, 14 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weiss et al. (Pat No.: 6741600) in view of Hepworth et al. (Pub No.: 2004/0073690).

For claim 1, Weiss et al. disclosed the method of conducting an initial media call session for establishing a media call and setting up the media path over the packet switch network (ATM network), the media path established by successful completion of the initial media call signaling set up session and used for receiving or transmitting media packets containing media payloads (Weiss et al. column 1, lines 5-30, column 3, lines 18-30). To establish the virtual circuits and virtual paths, network nodes that are to be included therein exchange a series of call setup and ACK messages;

sending and/or receiving one or more no-op media payload packets over the media path during and within the initial media call signaling session prior to establishing the media call and setting up the media path (column 1, lines 5-30, column 3, lines 18-30). The hub node 12 receives a conventional call setup (no-op) message;

requesting or receiving media path quality information associated with the no-op media payload packets during the initial media call signaling session prior to establishment of the media call being established by the initial media call signaling session (column 1, lines 5-30, column 3, lines 18-30). The call setup message includes the connection requirement information such as the quality of service or bandwidth (path quality information); and

selectively completing or terminating the initial media call signaling session according to the information obtained from the transmission of the no-op media payload packet during the initial media call signaling session, successful completion of the initial media call signaling session enabling subsequent transmission or playing out of media packets containing media payloads over the media path (column 3, lines 18-50). If sufficient bandwidth is available, the hub node 12 sends an Ack message back to the previous node and forwards the call setup message to the destination node. If insufficient bandwidth is detected, the hub node 12 will reject the call establishment.

However, Weiss et al. did not explicitly disclose the feature wherein the no-op media payload packets formatted as though the media packets contain media payloads but the no-op media payload packets formatted without media payloads and not containing media payloads. Hepworth et al. from the same or similar fields of endeavor

disclosed the feature the no-op media payload packets formatted as though the media packets contain media payloads but the no-op media payload packets formatted without media payloads and not containing media payloads (Hepworth et al. see paragraph 0044, fig. 2). Alternatively, test RTP/RTCP packets can be sent between the two endpoints to measure one or more of the bandwidth information noted above, such as jitter, packet delay, and packet loss. The packets would have a dummy payload and the packet headers would include information such as time stamps. Based on the broadest reasonable interpretation, the RTP/RTCP packets with dummy payload can be interpreted as the no-op payload packets that do not contain media payload. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the feature as taught by Hepworth et al. in the network of Weiss et al. The motivation for using the feature being that it increases transmission reliability by collecting link status information such as packet loss and delay.

Regarding claim 2, Weiss et al. disclosed the method including formatting the no-

op media payload packets as a Real Time Protocol (RTP) media payload packet that is formatted as though it contains media content but that contains no media content and sending the no-op media payload packets during a Session Initiation Protocol (SIP) media call signaling session (Weiss et al. column 1, lines 5-30, column 3, lines 18-30). To establish the virtual circuits and virtual paths, network nodes that are to be included therein exchange a series of call setup and ACK messages.

Regarding claim 3, Weiss et al. disclosed the method of generating a media path analysis reportfrom the information generated from the transmitted no-op media payload packets (Weiss et al. column 1, lines 5-30). When a node receives the call setup message, the node determines if it can handle the call based on the connection requirements specified in the message. If the node can handle the call, the node sends an appropriate ACK message (media path analysis report) back;

Regarding claim 10, Weiss et al. disclosed the method of including notifying a user of a media call according to the information associated with the transmission of the no-op media payload packets (Weiss et al. column 3, lines 18-50). If sufficient bandwidth is available, the hub node 12 sends an Ack message back to the previous node and forwards the call setup message to the destination node. If insufficient bandwidth is detected, the hub node 12 will reject the call establishment.

Regarding claim 11, Weiss et al. disclosed a processor configured to send or receive one or more packets formatted as if the packets are carrying a media payload but the one or more packets containing no media payload (Weiss et al. column 1, lines 5-30, column 3, lines 18-30). The hub node 12 (the processor) receives a conventional call setup (no-op) message;

the processor further configured to send or receive a media stream according to transmission information associated with the packets (Weiss et al. column 1, lines 5-30, column 3, lines 18-50). The call setup message includes the connection requirement information such as the quality of service or bandwidth (path quality information); If sufficient bandwidth is available, the hub node 12 sends an Ack message back to the

previous node and forwards the call setup message to the destination node. If insufficient bandwidth is detected, the hub node 12 will reject the call establishment.

However, Weiss et al. did not explicitly disclose the feature wherein the packet formatted without the media payload. Hepworth et al. from the same or similar fields of endeavor disclosed the feature the no-op media payload packets formatted as though the media packets contain media payloads but the no-op media payload packets formatted without media payloads and not containing media payloads (Hepworth et al. see paragraph 0044, fig. 2). Alternatively, test RTP/RTCP packets can be sent between the two endpoints to measure one or more of the bandwidth information noted above, such as jitter, packet delay, and packet loss. The packets would have a dummy payload and the packet headers would include information such as time stamps. Based on the broadest reasonable interpretation, the RTP/RTCP packets with dummy payload can be interpreted as the RTP payload packets that do not contain media payload. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the feature as taught by Hepworth et al. in the network of Weiss et al. The motivation for using the feature being that it increases transmission reliability by collecting link status information such as packet loss and delay.

Regarding claim 12, Weiss et al. disclosed the feature wherein the processor is configured to send and/or receive the one or more packets during and within a media call signaling session, the media call signaling session establishing and setting up the media path that is then subsequently used for sending or receiving the media stream (Weiss et al. column 3, lines 18-65). If sufficient bandwidth is available, the hub node 12

sends an Ack message back to the previous node and forwards the call setup message to the destination node. If insufficient bandwidth is detected, the hub node 12 will reject the call establishment.

Regarding claim 14, Weiss et al. disclosed the method of including a user interface configured to communicate with a device that initiates an IP network connection for transmitting the media stream (Weiss et al. column 3, lines 18-65). Each node 12 has a input (user interface) that receive call setup message for connection establishment.

Regarding claim 17, Hepworth et al. disclosed the feature wherein the processor is configured to send or receive the media stream according to the number of successfully transmitted packets and the jitter statistics for the packets (Hepworth et al. see paragraphs 0010-0021). When the collected bandwidth information (signaling) satisfies the predetermined threshold, the connection is established between the two endpoints. The bandwidth information includes one or more of the followings: received RTP packets, jitter buffer delay, jitter; packet loss burst sizes and etc.

6. Claims 4 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weiss et al. (Pat No.: 6741600) in view of Hepworth et al. (Pub No.: 2004/0073690) as applied to claim 3 above, and further in view of Bushmitch et al. (Pat No.: 6275471).

For claim 4, Weiss et al. and Hepworth et al. both did not explicitly disclose the feature wherein the media path analysis report is a Real Time Control Protocol (RTCP)

report Bushmitch et al. from the same or similar fields of endeavor disclosed the feature wherein the media path analysis report is a Real Time Control Protocol (RTCP) report (Bushmitch et al. column 6, lines 35-50). The initiation acknowledgement message is defined as an RTCP application specific message. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the feature as taught by Bushmitch et al. in the network of Weiss et al. and Hepworth et al. The motivation for using the feature being that it lowers transmission error rate by detecting/collecting quality of service metrics between endpoints.

Regarding claim 13, Bushmitch et al. disclosed the feature wherein the processor is configured to generate a Real Time Control Protocol (RTCP) report using the transmission information associated with the packets (Bushmitch et al. column 6, lines 35-50). The initiation acknowledgement message is defined as an RTCP application specific message.

7. Claims 5-8, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weiss et al. (Pat No.: 6741600) in view of Hepworth et al. (Pub No.: 2004/0073690) as applied to claim 3 above, and further in view of Teruhi et al. (Pub No.: 2003/0072269).

For claim 5, Weiss et al. and Hepworth et al. both did not explicitly disclose the method including setting a marker bit in the no-op media payload packets to initiate a receiver to immediately send back the media path analysis report. Teruhi et al. from the

same or similar fields of endeavor disclosed the feature of setting a marker bit in the no-op media payload packets to initiate a receiver to immediately send back the media path analysis report (Teruhi et al. fig. 3, paragraph 0045). In fig 3, The RTP header has a marker bit M field. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the feature as taught by Teruhi et al. in the network of Weiss et al. and Hepworth et al. The motivation for using the feature being that it can provide link or channel status quicker.

Regarding claim 6, Weiss et al. disclosed the method of including determining whether or not to transmit a media stream over the media path according to when or if the media path analysis report is received after transmitting the no-op media payload packets with the set marker bit (Weiss et al. column 3, lines 18-50). If sufficient bandwidth is available, the hub node 12 sends an Ack message back to the previous node and forwards the call setup message to the destination node. If insufficient bandwidth is detected, the hub node 12 will reject the call establishment.

Regarding claim 7, Teruhi et al. disclosed the method of including generating the

media path analysis report without playing out contents of the no-op media payload packets (Teruhi et al. paragraph 0062-0066). The source sends the sender report RTCP-SR at fixed time intervals;

Regarding claim 8, Teruhi et al. disclosed the method of receiving multiple no-op media payload packets during the same media call signaling session; and generating the media path analysis report according to transmission information for all of the

multiple no-op media payload packets (Teruhi et al. paragraph 0062-0066). The source sends the sender RTP packets over respective routes at the determined distribution;

Regarding claim 15, Teruhi et al. disclosed the feature wherein the processor is configured to conduct a signaling session that notifies a receiver that the packets are going to be used for analyzing the IP network (Teruhi et al. fig. 10, paragraph 0062-0066).

Regarding claim 16, Teruhi et al. disclosed the feature wherein the processor is configured to generate a marker bit in one of the packets that causes the receiver to send back the transmission information associated with the packets (Teruhi et al. fig. 3, paragraph 0045). In fig 3, The RTP packet comprises RTP header that has a marker bit M field. As shown in fig. 9, the destination node 12 receives multiple of RTP packets along with the RTCP-SR from the source node 11, which caused the destination node 12 to transmit a RTCP-RR back to the source node 11.

8. Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Teruhi et al. (Pub No.: 2003/0072269) in view of Hepworth et al. (Pub No.: 2004/0073690).

For claim 18, Teruhi et al. disclosed the method of initiating a Real Time Protocol (RTP) signaling session for establishing a media path for transporting RTP payload packets that contain media payloads (Teruhi et al. see paragraphs 0043-0044, fig. 2). As shown in fig. 2, in a data delivery system using RTP as a transport protocol,

connection are established between the source and destination nodes 11 and 12 via TCP channel 101 of RTSP and a UDP channel 102 of RTP. A control channel 103 by RTCP is used to control RTP data transmission, and it possesses a function of offering information on the quality of data delivery to an application as mentioned above;

setting a market bit in one of the RTP payload packets that causes a receiver to send back a Real Time Control Protocol (RTCP) report that contains media path information for the send RTP payload packets (Teruhi et al. fig. 3, paragraph 0045). In fig 3, The RTP packet comprises RTP header that has a marker bit M field. As shown in fig. 9, the destination node 12 receives multiple of RTP packets along with the RTCP-SR from the source node 11, which caused the destination node 12 to transmit a RTCP-RR back to the source node 11.

However, Teruhi et al. did not explicitly disclose the method of sending multiple RTP payload packets during and within the RTP signaling session that are formatted as if the RTP payload packets contain a media payload but the RTP payload packets formatted without media payloads and not containing any media payload.

Hepworth et al. from or same or similar fields of endeavor disclosed the method of sending multiple RTP payload packets during and within the RTP signaling session that are formatted as if the RTP payload packets contain a media payload but the RTP payload packets formatted without media payloads and not containing any media payload (Hepworth et al. see paragraph 0044, fig. 2). Alternatively, test RTP/RTCP packets can be sent between the two endpoints to measure one or more of the bandwidth information noted above, such as jitter, packet delay, and packet loss. The

packets would have a dummy payload and the packet headers would include information such as time stamps. Based on the broadest reasonable interpretation, the RTP/RTCP packets with dummy payload can be interpreted as the RTP payload packets that do not contain media payload. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the feature as taught by Hepworth et al. in the network of Weiss et al. The motivation for using the feature being that it increases transmission reliability by collecting link status information such as packet loss and delay.

Regarding claim 19, Hepworth et al. disclosed the method of receiving multiple RTP payload packets that contain no media payload; generating an RTCP report that that includes media path information for the received RTP payload packets; sending the RTCP report when one of the RTP payload packets is received that has a set marker bit; and establishing a media stream according to the media path information in the RTCP report (Hepworth et al. see paragraphs 0044-0049, fig. 2). Alternatively, test RTP/RTCP packets can be sent between the two endpoints to measure one or more of the bandwidth information noted above, such as jitter, packet delay, and packet loss. The packets would have a dummy payload and the packet headers would include information such as time stamps. A marker bit or flag would be included in the exchanged packets to notify the receiving endpoint that the packet is associated with an available bandwidth test. The details to implement either of these examples will be readily appreciated by one of ordinary skill in the art who associated with the RSVP and/or RTP/RTCP protocols;

9. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Teruhi et al. (Pub No.: 2003/0072269) in view of Hepworth et al. (Pub No.: 2004/0073690) as applied to claim 19 above, and further in view of Chu et al. (Pub No.: 2007/0286165).

For claim 20, Teruhi et al. and Hepworth et al. both did not explicitly disclose the feature of including delaying ringing a phone used for receiving the media stream until the RTCP report is received and indicates an acceptable media path for sending the media stream. Chu from the same or similar fields of endeavor disclosed the feature of including delaying ringing a phone used for receiving the media stream until the RTCP report is received and indicates an acceptable media path for sending the media stream (Chu see paragraphs 0036-0038, fig. 4). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the teaching of Chu et al. in the network of Teruhi et al. and Hepworth et al. The motivation for using the feature being that it provides more reliable transmission.

Allowable Subject Matter

10. Claim 9 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Examiner's Note:

Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAN YUEN whose telephone number is (571)270-1413. The examiner can normally be reached on Monday-Friday 10:00a.m-3:00p.m EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky O. Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ricky Ngo/
Supervisory Patent Examiner, Art Unit 2416

KY